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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/733,810 | 12/12/2003 | Atsushi Narusawa | Q78953 | 8813 |
| 23373 | 7590 | 12/13/2006 | EXAMINER | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | FABER, DAVID | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2178 | |

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/733,810 | Applicant(s) NARUSAWA, ATSUSHI | |
| | Examiner David Faber | Art Unit 2178 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 7-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the election/restriction filed 27 October 2006.

This office action is made Non-Final.

2. Applicant has elected Group I, claims 1-6 for examination.
 3. Claims 1-6 are pending. Claims 7-13 have been withdrawn from consideration.
- Claims 1, 2, 5, and 6 are independent claims.

Election/Restrictions

3. Applicant's election without traverse of 1-6 in the reply filed on 27 October 2006 is acknowledged.
4. Claims 7-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 27 October 2006.

Priority

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on 25 June 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 33 of FIG 12 and 100 of FIG 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "32" has been used to designate both Layout Means and Object Information Output Means. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "103" has been used to designate both text object and text object. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 1 and 5 disclose the limitations "judging whether a document ... comprises tags which **can** cause disagreement...." The use of the term "can" makes the claim

vague and indefinite, and does not imply a disagreement will occur, just that it **can** occur. Therefore, since a document comprises tags which can cause disagreement, the tags can also not cause disagreement. In other words, just because the tags can cause a disagreement, does not mean it will cause a disagreement, if at all. Thus, Claims 1 and 5 are rejected under 112 second paragraph for the use of the term "can" making the claim vague and indefinite. Furthermore, Examiner will view the claim as the disagreement not occurring since the claim does not disclose the disagreement occurring, if at all, throughout this Office action.

13. Furthermore, Claims 1 and 5 recite the limitation, "disagreement between the order in which the coordinate positions of objects are determined and the order in which the images of objects are formed." The Examiner is unsure what the disagreement is since the limitation fails to give a clear, descriptive definition of what is determined or defined as a disagreement between the two orders within the claim limitation, thus making it vague and indefinite.

14. In addition, Claims 1, 2 and 5-6 recite the limitations "processing to determine coordinate positions and processing to form images are executed in parallel." Examiner is unsure the Applicant means by the disclosure of both processes are executed in parallel. In order for an image to form, its coordinate positions must be determined first before the image forming, thus both processes cannot be executed in parallel, i.e. the same time. The Examiner believes Applicant is trying to disclose for each image, determine the coordinate positions, and then process to form the image before determining the coordinate position and formation of another image. Thus, the

Examiner will view this limitation as for each image, determine the coordinate positions, and then process to form the image before determining the coordinate position and formation of another image within this Office action.

15. Claims 1 and 5 recite the limitation "the coordinate positions of objects" in lines 5-6, and lines 2-3, respectively. There is insufficient antecedent basis for these limitations in the claims.

16. Claims 1 and 5 recite the limitation "the images of objects" in lines 5-6, and lines 3-4, respectively. There is insufficient antecedent basis for these limitations in the claims.

17. Claims 1 and 5 recite the limitation "the end of processing to determine coordinate positions" in lines 5-6, and 6-7, respectively. There is insufficient antecedent basis for this limitation in the claim.

18. Claim 2 and 6 disclose the limitations "judging whether a document ... comprises tags which **can** impede the parallel execution..." The use of the term "can" makes the claim vague and indefinite, and does not imply the impeding will occur, just that it **can** occur. Therefore, since a document comprises tags which can impede the parallel execution, the tags can also not impede the parallel execution. In other words, just because the tags can impede the parallel execution, does not mean it will impede, if at all. Thus, Claims 2 and 6 are rejected under 112 second paragraph for the use of the term "can" making the claim vague and indefinite. Furthermore, Examiner will view the claim as the impeding not occurring since the claim does not disclose the impeding occurs, if at all, throughout this Office action.

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19. Furthermore, Claims 2 and 6 recite the limitation "the parallel execution of processing to determine the coordinate positions of objects and processing to form the images of objects." The Examiner is unsure what the Applicant means by the disclosure of both processes are executed in parallel. In order for an image to form, its coordinate positions must be determined first before the image forming, thus both processes cannot be executed in parallel, i.e. the same time. Since the Examiner is unsure how the parallel execution occurs within the claims, Claim 2 and 6 are rejected under 112, 2nd paragraph by the limitation being vague and indefinite. Thus, the Examiner will view this limitation as for each image, determine the coordinate positions, and then process to form the image before determining the coordinate position and formation of another image within this Office action

20. Claims 2 and 6 recite the limitation "the parallel execution of processing to determine the coordinate positions of objects and processing to form images of objects" in lines 16-17 and lines 12-13, respectively. There is insufficient antecedent basis for these limitations in the claims.

21. Claim 2 and 6 recite recites the limitation "the end of processing to determine coordinate positions" in lines 19-20, and lines 16-17, respectively. There is insufficient antecedent basis for these limitations in the claims.

22. Claim 3 recites the limitation "the entire document" in lines 25-26 and the limitation "the type of said tags" in line 26. There is insufficient antecedent basis for these limitations in the claim.

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Claim Rejections - 35 USC § 101

23. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

24. Claims 5-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For your reference, below is a section from MPEP 2105 :

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se
Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process

claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim.

25. Claims 5-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be claiming "software systems" i.e. systems without hardware indication, which is computer program per se. Since the computer program is not embodied on a tangible computer readable medium, they appear non-statutory.

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US Patent 6,377,354, filed 9/21/1998, and further in view of W3School ("HTML Tutorial: Welcome to HTML School", published as of 1/23/2002).

As per independent claim 1, Claim 1 incorporates the views based on the 35 USC 112, 2nd paragraph, rejections and the rationale incorporated. Therefore, Nguyen et al discloses of a method analyzing a location of the text and graphics elements (object images) to be printed of determining the location of an object image that may compose of a graphic or a text, and after determining the location of it overlapping a graphic or not, it processes to form the object to appear onto the document when it

begins printing. When the process of overlapping is being determine, a sense of disagreement with direct placement is being considered if overlapped is revealed since the process would have merge the two objects together (i.e. retrieve the other object's position and merge the two as one) then sent to output buffer to be formed. If no overlapping is revealed, it is sent to the printer to be formed by the printer. Nguyen et al discloses that a document requires many print calls be processed hence the method is repeated every time for each object presented in the document. (Abstract; Column 6, lines 35-49, 59-62; Column 7, 4-8, 16-61)

However, Nguyen et al fails to disclose that the document is written in a structured tag language comprising tags. However, W3Schools discloses the language HTML wherein a HTML document contains markup tags that discloses how the document will appear when displayed (Pg 1, "HTML Introduction"; Pg 5).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified Nguyen et al's method of printing a document with objects with W3School's disclosure of HTML documents since it would have provided HTML provides essential features of hypertext, that allows documents (web page) to link to over documents, and universally, that's allows any computer to read a HTML document since the documents are text files.

As per independent claim 2, Claim 2 incorporates the views based on the 35 USC 112, 2nd paragraph, rejections and the rationale incorporated. Furthermore, Claim 2 recites similar limitations as in Claim 1, and is similar rejected under rationale.

As per dependent claim 3, Nguyen et al discloses method involves the text and

graphics elements within the document, therefore, involving the whole document itself. In addition, each element is considered a portion of the document. (Abstract, lines 1-5, FIG 3-4)

As per dependent claim 4, Nguyen et al fails to specifically disclose said tags comprise at least one among "position"-type tags, "margin"-type tags, "line_height"-type tags, "img"-type tags, and "counter"-type tags. Based on the rejection of the use of a HTML document wherein the HTML document comprises tags in Claim 1 by Nguyen et al and W3School and the rationale incorporated, W3School discloses HTML comprises "img"-type tags. (pg 7)

As per independent claim 5, Claim 5 recites similar limitations as in Claim 1 and is similarly rejected under rationale.

As per independent claim 6, Claim 6 recites similar limitations as in Claim 2 and is similarly rejected under rationale.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

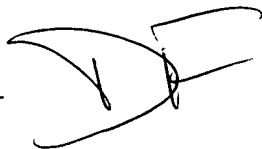
- Hall et al (US PGPub 2004/0205553): Discloses resources to allow control over image processing operators such as Z-order.
- Nguyen et al (US Patent #4,476,925): Discloses printing documents that over the Z-order problem of elements in a document.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Faber
Patent Examiner
AU 2178



STEPHEN HONG
SUPERVISORY PATENT EXAMINER